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Supreme Court of the United States.

October Term, 1906.

No. 1756.

COMPUTING SCALE COMPANY OF AMERICA,

Appellant,

vs.

THE AUTOMATIC SCALE COMPANY.

Appeal from the Court of Appeals of the District of Columbia.

BRIEF ON BEHALF OF THE APPELLEE.

B. HILTON JACKSON,
H. P. DOOLITTLE,
Counsel for Appellee.

Supreme Court of the United States.

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Appellant,

vs.

THE AUTOMATIC SCALE COMPANY.

Appeal from the Court of Appeals of the District of Columbia.

BRIEF ON BEHALF OF THE APPELLEE

This is an appeal from a decree by Justice Duell, of the Court of Appeals, affirming the dismissal of appellant's bill, with costs.

It was a suit for infringement of a patent, and the Supreme Court of the District sustained the defenses of invalidity and non-infringement of the claims set up by the defendant-appellee.

The opinion of Judge Gould is found on page 193 of the record, and the opinion of Justice Duell on page 200. They contain a clear, correct and complete statement of the facts, and the logical soundness of the conclusions reached is evident from the face of the statement itself.

This suit was brought on U. S. Letters patent to A. B. Hayden, No. 700919, May 27, 1902, application filed Sept. 8, 1899, for "Improvement in Computing Scales."

Defendant put in general denials, including denial of infringement, to all the allegations of the bill of complaint, and set up the following special statutory defenses:

1. Lack of novelty, in that every material and substantial part of the alleged invention had been previously patented in the United States as in certain patents, which are named and enumerated.

2. That prior to the alleged invention of the said Hayden, the said invention had been invented, constructed and practically and successfully used by one Calvin F. Christopher in Washington, D. C., and Spartanburg, South Carolina.

3. That, in view of the prior art, the alleged invention did not involve or constitute any patentable novelty or invention.

4. That the combinations set forth and claimed in said patent were unpatentable aggregations of old and well known parts.

The proofs in behalf of the complainant-appellant consist alone of Hayden's patent, a scale of defendant's manufacture, the testimony of Arthur S. Browne, expert, and certified copies of the file wrapper and contents (application papers) of said patent 700919, and of the record of an interference between

the said Hayden's application and those of one Culmer and one Stimpson.

The testimony of the single witness, Browne, in behalf of complainant, was confined to claims 1, 2, 6, 7 and 8, of said patent 700919.

The proofs in behalf of defendant consist of copies of the prior patents set up in the answer, the testimony of George P. Whittlesey, expert, the testimony of Calvin F. Christopher, C. K. Christopher, A. G. Pless, W. T. Finch, and W. M. Bomar, certain exhibits of parts of mechanisms accompanying the testimony of the Christophers and copies of the Christopher patents, Nos. 588128, 648609, and 658732. Said patent, 588128, issued jointly to C. F. and C. K. Christopher.

To ascertain if these defenses have been established it is necessary to first inquire as to the nature and scope of the Hayden patent and of the particular claims sued upon; and at the same time to observe some of the leading rules of construction especially applicable to patents.

Some of these requirements have apparently been overlooked by Mr. Browne, appellant's expert, in giving his testimony.

In his direct examination he clearly describes the general construction and operation of the invention as set forth in the Hayden patent, compares the matter of defendant's scale with that of claims 1, 2, 6, 7 and 8 of Hayden, arrives at the conclusion that the devices of the respective parties are substantially identical, and that there is a clear infringement. He does not discuss the limitations put on the patent and claims by the Patent Office, and by Hayden himself, and of course does not refer to the previous state of the art.

But in his examination in rebuttal in his reply to Mr. Whittlesey, defendant's expert, and after the prior state of the art has been developed and the Patent Office record of Hayden's patent has been put in, Mr. Browne gives a broader exposition of Hayden's claims in suit than before, and defines the position that Hayden occupies in his opinion in respect to those who went before him in this line of invention.

After reviewing the art, as he understands it, Mr. Browne reaches the following conclusions as to what Hayden had produced. For convenience we have enumerated them, and the italics are ours:

> "1. Hayden was the first to produce an automatically rotated vertical chart drum for a spring computing scale. * * *
>
> 2. Hayden, by the patent in suit, produces a scale in which the entire dimensions are only slightly larger than the drum itself.
>
> 3. Substantially all of the operating mechanism is located within the chart drum itself.
>
> 4. A single casing serves not only to house and protect both the enclosed chart drum, but also the operating mechanism as well.
>
> 5. Minimum compactness, enabling a large chart drum with the maximum number of computations therein to be employed, without unduly increasing the height of the scale.
>
> 6. The weighing mechanism reduced to a simple form.
>
> 7. All parts adequately housed and protected with the minimum difficulty and expense.
>
> 8. Making greatest dimensions of the scale the vertical dimension—a matter of importance to grocers, the vertical space above the

counter being more available than the horizontal space.

9. All of these advantages are incidental to the vertical drum, and are realized *while at the same time the drum is automatically rotated by appropriate connection with the movable balancing mechanism.*

10. Hayden was the first to show how this could be done consistent with the automatically rotating chart drum."

Deposition of Arthur Browne, Record, p. 145.

The inference necessarily drawn from this summary is that Hayden was the first inventor of mechanisms for producing all of these results, and that his claims cover broadly these results and advantages.

Our position is that Hayden was not the first to invent or produce mechanisms to accomplish *any one of these advantages, and that he does not in his patent or in the claims sued upon attempt to claim, broadly, mechanisms for accomplishing any one of* such results, and that he was required by the Patent Office to so modify his claims as to exclude therefrom protection for mechanisms alone covering the arrangement of vertical cylinders.

For the reasons doubtless that his attention was not called to it, Mr. Browne ignores that rule of construction, none better settled now, that a patentee is bound by the written record he makes in the Patent Office in obtaining his patent. What he did then either in shaping his claims by argument, or by amendment, what the office required to be done, if any such thing were part of the inducement to the grant

which was voluntarily or involuntarily incorporated in the patent amounting to limitations or restrictions of the claims, are all considered in construing the patent. They constitute a part of the written negotiations and terms of the contract between the Government and the patentee, which result in the granting and the acceptance of the patent.

> Westinghouse *vs.* Boyden Power Brake Co., 170 U. S., 537; Kokomo Fence Co. *vs.* Kitselman, 189 U. S., 8, 1903; Railway Co. *vs.* Saples, 97 U. S., 554, 1878; Durham *vs.* Seymour, Commissioner of Patents, D. C. Court of Appeals, 1895; 71 O. G., 601, 6 Court of Appeals; Morgan Envelope Co. *vs.* Albany Paper Co., 152 U. S., 329, 1894; Hubbell *vs.* United States, 197 U. S., 77.

Weight should be given in the first place to Hayden's position in the art as admitted by him at the outset of his specification. "It relates," he says "particularly to an improvement in computing scales of the spring balance type;" and that his objects was to "especially increase the computing capacity of scales of this type." He starts out with this admission that he is improving a well-known type of machines, and he winds up with claims not for any machine, broadly speaking, or for a method, or a particular part or a particular step, but for combinations of numerous parts in a spring balancing scale, all of which parts considered separately are old as a presumption of law, because not separately claimed. Dunbar *vs.* Myers, 4 Otto, 187. And further as to combination claims they cannot by construction be so altered as to cover more elements, so as not to be invalid

(Howe Machine Co. *vs.* National Needle Co., 134 U. S., 394, 1890; Morgan Envelope Co. *vs.* Albany Paper Co., 152 U. S., 429, 1894), nor fewer elements to catch supposed infringers. (Shepard *vs.* Currigan, 116 U. S., 597; Sutter *vs.* Robinson, 119 U. S., 541; McLain *vs.* Ortmaper, 141 U. S., 425, 1891. Sec. 186, Walker on patents.)

But let us see what record Hayden made for himself in the Patent Office.

Hayden's record in the Patent Office covers the largest part of appellant's record in this case, pp. 147 to 191. The first thing he did was to file claims for structures broad enough to cover just the very advantage set forth by Mr. Browne as having been produced by and belonging to him (Hayden), as the first and original inventor of the vertical arrangement of automatic chart drum, etc.

This first claim and similar claims, 8 and 9, were (Rec., p. 198):

1. In spring balance computing scale, the combination of a suitably supported vertical non-rotatable casting provided with a price-index, a vertical rotatable computing cylinder journalled in said casing, provided with cost computations, a spring-supported load pan supported from said casing, and means connected with said pan and cylinder for rotating the cylinder, as the pan is lowered under pressure, substantially as and for the purpose set forth.

8. In a spring-balance scale, the combination of a vertical non-rotatable casing provided with a vertical price-index, a vertical computing cylinder, journalled in said casing provided with circumferential columns of computations opposite the numbers of

said price-index, a weight index arranged in a circumferential column, each computation being set in vertical alignment with its appropriate weight index mark and in horizontal alignment with its price index number, a load-pan spring connection between said pan and casing and means connected with said pan and cylinder for turniug the cylinder as the pan moves vertically, substantially as and for the purpose set forth.

9. In a spring-balance scale, a casing provided with a vertical price-index, a computing cylinder provided with a circumferential column graduated to pounds and ounces, and provided also with circumferential columns graduated to pennies, and provided with computations for pounds set in appropriate circumferential columns and in vertical alignment with their proper pound numbers, a spring supported load pan, and means connected with said pan for turning said cylinder as the pan is moved vertically, substantially as and for the purpose set forth.

The 3d claim was similar.

The application with these claims was filed September 8, 1899. On October 9, 1899, the examiner in the Patent Office having charge of that application wrote, among other things, the following:

> "Claim 1, 3, 8 and 9 are rejected upon the patent to Smith, 545616, September 30, 1895, Price Scales, in view of the patent to Turnbull, 378382, Feb. 21, 1888, Spring Scales. *It would not involve invention to arrange upon Turnbull's scales a vertical stationary casing*

> *having within it a revoluble computing chart, the axis being inverted with the index carrying shaft P shown in the Turnbull patent.*" Record, p. 153.

On October 21, 1899, the attorneys of Hayden wrote the Patent Office as follows:

> "A reconsideration of the claims is requested, for the reason that it is believed that the references cited do not anticipate any of the claims. In both of the references cited a rack bar extending transversely of the center of rotation of the computing chart series, by means of engagement with a pinion at the axis of the computing chart, to rotate the latter. This is entirely different from applicant's construction, and it is not seen that the references are pertinent to the issue. Certainly the references neither singly nor taken together anticipate the structure set forth in the claims and there can hardly be any question that the construction which applicant shows is a substantial improvement in the art. It is hoped that all the claims may be allowed."

To this the examiner replied on October 27, 1899. After requiring a certain amendment of drawings in respect to the computing chart, he says:

> "Claims 1, 8 and 9 are again rejected upon the references of the record; it being held that it would not involve invention to arrange upon the vertical shaft of Turnbull's scale a computing chart and inclosing case having the characteristics of the Smith scale."

On December 7, 1899, the attorneys for Hayden amended his application by *striking out* claims 1, 8 and 9, and added these remarks:

> "These claims are cancelled, not because considered unallowable, but because it is not desired to prosecute an appeal, in view of the fact that the allowed claims appear to cover the invention as it would be constructed in practice. The cancellation is made therefore, without prejudice to the claims which remain."

It is not material to the point we are now making, who was right or who was wrong in that controversy, whether the examiner or the attorney. It is sufficient to say that said claims 1, 8 and 9 went out of the case, and nothing can set them up again, under the decisions of the Supreme Court, above cited. And yet this is just what Mr. Browne attempts to do in his presentation of Mr. Hayden to this court and to the world as a pioneer inventor, and the first producer of the various results which he enumerates, which we have above quoted.

After reading these cancelled claims and fitting them to Mr. Browne's definition of the invention the patent is supposed to cover, the inquiry is forcibly presented what was left on which to issue a patent.

But the Patent Office examiner and the applicant, although they had eliminated the features worthy of the name "patentable," yet had not exhausted their ingenuity in the collection of words into separate claims expressing not a shadow of difference in meaning, and differing from the cancelled claims only in the addition of words describing common charac-

teristics of nearly all prior scales. Thus, on August 13, 1900 (Rec., p. 163), the examiner suggested a claim to Hayden for the purposes of an interference with a co-pending application, and on August 24 (Rec., p. 164) Hayden inserted the suggested claim as claim 6. *But even this specific claim was found not to be patentable.* The examiner had overlooked an important reference and on September 7, 1900 (Rec., p. 165), he rejected the claim 6, which he had suggested on the prior patent to Herr, No. 651801, June 12, 1900; but in his letter of rejection the examiner, in over-merciful regard for the disappointment of the applicant, stated that the claim might "be rendered allowable by inserting *depending* before 'means' in line 6," which insertion merely defines the scale-pan as depending or hanging.

Herr has a counter-scale, like a druggist's scale, with the pan alongside the computing cylinder. The examiner must have forgotten for the while that all hanging meat-scales have a "depending" load-supporting means or pan.

For the purpose of convenience in comparison the following arrangement shows the original cancelled claim 1 parallel with the patent claims 1 and 2, with the words inserted in the latter by amendment italicized and the word distinguishing claim 2 from claim 1 underlined. It also shows the cancelled or amended claim 6, of August 24, parallel with the patent claims 7 and 8, with the new matter in the latter italicized.

Patent claims 7 and 8 are selected because we have already shown that "depending" was the only thing added to put patent claim 6 in its present form and because these claims 6, 7 and 8 described *exactly the same mechanism* upon which point both experts and

the court below are in agreement. The only difference in words is that claims 7 and 8 call for a load-supporting means, that is the scale-pan at the lower end of the runner and beneath it, which means precisely the same as the "depending" pan in claim 6.

Original Claim 1 rejected on Smith in view of Turnbull, and cancelled.

1. In a spring-balance computing scale, the combination of a suitably supported vertical non-rotatable casing provided with a price-index, a vertical rotatable computing cylinder journalled in said casing, provided with cost computations, a spring-supported load-pan supported from said casing and means connected with said pan and cylinder for rotating the cylinder as the pan is lowered under pressure, substantially as and for the purpose set forth.

(Rec., p. 150.)

Patent claims 1 and 2.

1. In a spring-balance computing scale, the combination of a suitably supported vertical non-rotatable casing provided with a price-index, a vertical rotatable computing cylinder journalled in said casing, provided with cost computations, a spring-supported, load-*bearing and cylinder-revolving rod suspended from said casing* and connecting means *between said rod and computing-cylinder, whereby by longitudinal movement of the rod rotary movement is imparted to said cylinder,* substantially as and for the purpose set forth.

2. In a spring-balance computing-scale, the combination of a suitable supported vertical non-rotatable casing provided with a price-index, a vertical

Original claim 6, Am'd't. of Aug. 24, 1900. Cancelled in view of Herr, 651801.

6. In a spring-balance, the combination of a non-rotating frame providing an external casing having means for supporting it from above, weighing spring secured at their upper ends to rigid parts of said frame, a vertically-movable runner which is suspended from the lower ends of said springs and is provided with means to support the load, a chart drum rotatably mounted within said casing on a rotatable computing cylinder journalled in said casing, provided with cost computations, a spring-supported load *bearing and cylinder-revolving rod non-rotatably suspended from said casing, and connecting means between said rod* and computing cylinder, *whereby longitudinal movement of the rod produces rotary movement of the cylinder,* substantially as and for the purpose set forth.

Patent claims 7 and 8.

7. In a spring-balance the combination of an external non-rotating frame adapted to be supported from above, weighing springs secured at their upper ends to rigid parts of said frame, a vertically-movable runner which is suspended from the lower ends of said springs and is provided *at its lower end with means* to support the load *beneath it,* a chart-drum rotatably mounted within said frame on a vertical axis and having external hori-

vertical axis and having external horizontal rows of valve-indicating figures computed at different rates, said casing having a slight opening through which portions of said valve-indicating rows may be seen, and corresponding rate-indicating figures on the outer face of said frame adjacent to the valve-indicating rows on the chart-drum and mechanism for translating the vertical movement of the runner into the rotary movements of the chart-drum.

zontal rows of valve-indicating figures computed at different rates, said external frame being apertured, whereby portions of said value indicating rows may be seen, and corresponding rate-indicating figures on the outer face of said frame adjacent to the value-indicating rows on the chart-drum, and mechanism for translating the vertical movements of the runner into the rotary movements of the chart-drum, substantially as specified.

8. In a spring-balance, the combination of an external non-rotating frame, weighing springs supported from said frame, a vertically movable runner which is suspended from said springs and is provided *at its lower end* with means to support the load *beneath it,* a chart-drum rotatably mounted within said frame on a vertical axis and having external horizontal rows of value-indicating figures computed at different rates,

> said external frame being provided with a vertical aperture, whereby portions of said value-indicating rows may be seen, and corresponding-rate indicating figures on the outer surface of said frame adjacent to said aperture and corresponding with said value-indicating rows on the chart-drum, and mechanism for translating the vertical movements of the runner into the rotary movements of the chart-drum.

On comparing claim 1 that was originally struck out with claim 1 in the patent, which was originally claim 2 of the application, and now sued on, it will be seen that the only difference between the two claims is the omission of mention in the present first claim of the spring supported load pan and its means of connection with said pan and the rotating cylinder, and the substitution therefor of "a spring supported load bearing and cylinder revolving rod suspended from the casing and connecting means between rod and computing cylinder, whereby by longitudinal movement of the rod rotary movement is imparted to said cylinder, substantially as and for the purpose set forth."

So that, after all, the only feature in claim 1, which in the opinion of the examiner in the Patent Office rendered it patentable, is "spring supported load-

bearing and cylinder revolving rod suspended from the outer non-rotating casing." The same may be said of claim 2.

In this connection an admission and statement in the specification in regard to the character of this rod is important in the interpretation of this claim. It is found near the close of page 1, of the Hayden specification, and is as follows:

> "It will be noted that in the construction shown the rod E is non-rotatable, and this is the preferred construction. *The spiral rod passing through the lower ends of the casing* and serving, by means of its connection with the two cylinders to rotate the computing cylinder *is regarded as the essence of this feature of the invention,* however, regardless of the precise details of connection between cylinders and rod."

It will be seen that the function of this rod is to rotate the computing cylinder, and this, too, without reference to the vertical arrangement of the cylinders.

In view of these limitations and action of the Patent Office, it seems to us that the idea of the vertical arrangement of computing chart drum and casing and all advantages due therefrom were given up and that we are called upon to only show that a rod having substantially the same character and function as given it by Browne in the type of spring-balance computing scales is old, in order to meet claim 1 as well as claim 2 of the Hayden patent. This we submit is found in several patents.

Mr. Whittlesey, defendant's expert, as well as Mr.

Browne, was not called upon to give any opinion or statement upon the Patent Office record of Hayden's application. The effect of that record as it affects the construction of the claims is for the court alone to determine. Hence they both assume that the "*vertical*" arrangement of the outer and inner cylinders and the "*vertical*" rod or "axis" must be regarded as essential in construing the claims in view of the previous state of the art.

Mr. Whittlesey says, on page 68:

> "Among the patents set up in the answer I do not find any automatic computing scale which precisely meets the terms of these claims. But if we omit from these claims the word 'vertical,' or any equivalent thereof, then it is possible to read the claims directly upon several of the patents mentioned in the answer."

Had Mr. Whittlesey been aware that the "*vertical*" idea had already been eliminated from the claims as an element of novelty by the action of the Patent Office and Hayden, he would not have qualified his answer as he did. He proceeds as follows:

> "The oldest of these patents thus applicable to the claims is that to Phinney, No. 106869, August 30, 1870 (p. 124), which shows a spring balance computing scale comprising a suitably supported non-rotatable casing provided with a price index, a rotatable computing cylinder journalled in said casing provided with cost computations, a spring supported load bearing and cylinder revolving rod suspended

from such casing and connecting means between rod and computing cylinder, whereby a longitudinal movement of the rod rotary movement is imparted to said cylinder. This description of the Phinney construction is an exact quotation of the substance of claim 1 of the Hayden patent with the word 'vertical' omitted therefrom, the sole difference between Phinney and Hayden, so far as this first claim is concerned, being that Hayden's cylinders are vertical, while Phinney's are horizontal.

"The second claim of the Hayden patent can also be read exactly upon the Phinney construction by omitting the word 'vertical' in lines 2 and 4 of said claim. The same is true of claims 6, 7 and 8, since the only difference between the constructions set up in said claims and the construction of the Phinney is the arrangement of the cylinders on a vertical axis instead of a horizontal axis.

"The prior art contains at least two other patents concerning which the same statements can be made as have been made above in regard to the Phinney patent. These patents are 421805, to Babcock, February 18, 1900 (p. 133), and 545616 to Smith, September 3, 1895 (p. 150). Both these patents show spring scales having vertically movable load supporting rods attached to the spring, stationary cylinders or the equivalent thereof, provided with price marks and a longitudinal sight opening, and rotatable chart-drums operatively connected to the vertically movable load supporting rod. The stationary and rotatable cylinders in these patents revolve on horizontal

axes instead of on vertical axes, and this is the sole difference between these patents and the claims 1, 2, 6, 7 and 8, of the said patent."

Pp. 67-69, Rec.

There isn't a word in Mr. Browne's testimony showing that "a spring supported, load-bearing, and cylinder-revolving rod, non-rotatably suspended from the casing" is not just as applicable to a horizontal cylinder, or to cylinders on horizontal axes as to a vertical cylinder, or cylinders on vertical axes. The function of said rod is to impart by its longitudinal movement rotary movement to the computing cylinder, as stated in Hayden's first and second claims, and this may be done whether the computing cylinder is vertical or horizontal, and there is nothing to the contrary said in the record in this case. What we allege is shown and described in the Phinney patent, 106869.

In this patent F is a "spring-supported, load-bearing and cylinder-revolving rod, non-rotatably suspended from the casing."

In the Babcock patent 421895 (Rec., p. 92), the bar N meets this same construction as broadly interpreted by Mr. Browne.

In the Swihart patent (Rec., p. 101), E is such a rod.

In the Smith patent (Rec., p. 106), *c'* or *b'* is such a rod according to Mr. Browne's interpretation. Anyhow Smith has substantially the same construction as that of appellee for rotating the cylinder with the exception of the bevel gear for applying the rotating motion to the vertical cylinder.

It is asserted by Whittlesey and *uncontradicted by Browne* that the Phinney, Smith and Babcock pat-

ents each disclose, taking Browne's broad interpretation of the "rod" and its connecting means, every element of these two claims except the word "vertical," and this assertion can be corroborated by a mere glance at the drawings of these prior patents. But Hayden had already, by cancelling original claim 1, disclaimed the combination of the vertical arrangement with the general arrangement used by Smith and no new *and patentable combination could be created by merely bringing into the claims other old elements of Smith's specific construction.* No new result was produced. No different operation. A mere aggregation was formed by adding these old elements together. How *could* there be a patentable combination between an old vertical *position* of a cylinder and an old specific means adapted for either longitudinal or vertical cylinder, for operating the cylinder?

The only matter that could make such a combination novel would be the *specific features that make the rod and its connecting means with the cylinder of particular use in and application to the vertical cylinder.* These features consist of the spirals or similar means on the rod, the rod being suspended, that is projecting down and passing through the cylinder and made non-rotatable, so that the spirals will engage the rollers f, f' carried by the inside cylinder and thus rotate the cylinder. Thus construction differed from the prior patents and it forms the subject of most of the other claims of the Hayden patent not in suit. The claims in suit could only be distinguished from the prior art by reading into them this rod and its particular or similar connecting means with the computing cylinder.

Let us now return to the summary, heretofore

given, of Mr. Browne of the ideas he claims for Mr. Hayden and show specifically whereby and wherein they are met.

1. An automatically rotated vertical chart-drum.

No claim for this: Attempt to broadly claim this in combination with vertical casing, weighing pan and means connecting pan and chart-drum to rotate the latter, rejected by Patent Office, as already shown.

2. A scale, the entire dimensions of which are only slightly longer than the drum itself.

No claim for this: And met in the old Beckwith patent 12249 of 1855, and Phinney's patent 106869. In this connection there is another point, the 8th, of Browne, also met in the same patent, namely, the vertical dimension whereby the vertical space above the counter is made available—instead of the horizontal space—a matter of so much importance to grocers.

3. All the operating means located within the chart-drum.

Not claimed. Old in Beckwith, Phinney and Turnbull patents.

In regard to the Beckwith patent Mr. Whittlesey testifies as follows:

> "The prior art, as shown in the patents cited in the answer, also discloses the fact that it is not a new idea with Hayden to arrange a chart-drum to rotate on a vertical axis. This had been done long before, as is shown, for instance, in the patent to Beckwith, No. 12249, January 16, 1855. This patent shows a spring scale having a vertically movable load supporting rod. Concentric with this rod is a

> freely rotatable sheet metal cylinder carrying price computations and weight indicating figures. On the road-supporting rod is an index co-operating with such cylinder. When the rod moves downward under the weight of the article the index comes to rest in the horizontal plane of the proper weight indicating figures and the cylinder can then be rotated by hand until the proper figure representing the price per pound is in vertical alignment with the index, which will then register with the figures indicating the total price of the article being weighed."

Mr. Browne calls attention to the fact that it is the index that is moved by hand and not the cylinder. But it is no matter, as far as the disclosure of the vertical cylinder and relatively rotatable indicating parts are concerned.

> "A somewhat similar device is shown in the patent to Freeman, 431456, July 1, 1890. In this case the rotatable cylinder carrying the computations is mounted to move vertically also and serves as a support for the article being weighed, being attached to the lower end of the spring. When this cylinder has been depressed to a certain extent by an article laid upon it, it can then be rotated in order to bring the figure indicating the price per pound in vertical alignment with an opening in the stationary outer cylinder, whereupon the figures representing the total price of the article can be read through said opening."
>
> Whittlesey, p. 80.

The Camp patent, 103977, has a spring scale with hanging pan, vertical casing, chart drum on a vertical axis and means to turn the chart-drum to show the cost figures through an opening in the casing.

It is unnecessary, however, to go into the constructions of these prior patents specifically, as Hayden himself admitted they were pertinent and cancelled his claims on the vertical cylinders; not only the comparatively broad, original first claim, but also the limited 8th and 9th original claims, and the very claim (6) suggested by the examiner (page 216, Record.)

4. A single casing to enclose and protect the chart-drum and operating mechanism. No claim for this, and old in Phinney, 106869, and Smith, 545616.

5. Compactness without increasing height—no claim—shown in same patents.

6, 7, 9. Simplicity, adequately housing and protecting with minimum difficulty and expense combined with automatic rotating of chart-drum. No claim covering the same. All old, broadly speaking, in Phinney, Smith and Washburne, claims involving same rejected, and also old in Freeman's patent, 431456.

The 8th and 10th points we have considered.

Mr. Browne calls attention to and dwells upon the fact in his chronological account of the art that it was a long step from Beckwith in 1855 to Phinney in 1870, and Babcock and Freeman in 1890, Smith in 1895, finally culminating in the perfect form of Hayden in 1902, after nearly 50 years of stress and storm.

The inferences is that the prior patents cited all show impracticable, unused, or discarded devices, which have all been supplanted by Hayden. *If such were the case it is strange that not a word of proof*

or of allegation in the bill of complaint has been given of the use of the Hayden device by complainant.

But the law takes no note of the lapse of time from the ancient to the modern inventor.

If one of the "lost arts" of the Egyptian or the Greek is rediscovered it is enough under our system of patent law to defeat the monopoly of the latest genius in the field if the ancient description meets the claims to inventorship of the late comer.

The English and American patent of Thomson in 1845 for the pneumatic tire and modes of preventing its puncture, lay dormant for nearly 50 years, and then was brought forward under the law when the art of bicycling first sprung into popular favor to meet the claims of many applicants for patents.

Without fear or hesitation we ask a comparison of Mr. Browne's summary of the Hayden patent, above cited, with Mr. Whittlesey's.

Whittlesey says in conclusion:

Mr. Hayden has therefore adopted in the old non-automatic vertical cylinder scale the idea of automatic operation, also old in the horizontal cylinder scales. Apparently this is all that the claims of this patent cover, excepting those which relate to the specific means by which he connects his load-supporting rod with his chart-drum. And these claims are not the ones which the complainant's expert has selected as covering defendant's scale.

> "Mr. Hayden's patent does not contain a syllable of statement in regard to the especial advantages, if there are any, which result from the construction which he has adopted.

> There is no statement of disadvantages inherent in the automatic horizontal cylinder scales or any statement of peculiar advantages to be derived from the vertical cylinder arrangement nor any statement why the vertical cylinder automatic scale possesses any more advantages over the vertical cylinder non-automatic scale, than are possessed by the horizontal cylinder automatic scale over the vertical cylinder non-automatic scale. In other words, there is no foundation in his specification for asserting any peculiar advantages to be derived from his vertical construction, and in view of the state of the art as set forth it is difficult to understand wherein the patentable novelty exists in his claims 1, 2, 6, 7 and 8."
>
> (Rec., p. 69.)

Now, taking up the other claims, 6, 7 and 8, in controversy, it will be seen that they are broader than claims 1 and 2 in respect to the means for translating the downward pull on the scale pan into the rotary movement of the cylinder. They differ from said first and second claims in the inclusion of the runner and the scale pan supported beneath or depending from the same. But a runner is found in all these prior scales. Therefore, the references to claims 1 and 2 are equally pertinent to claims 6, 7 and 8.

It will be seen that the examiner suggested claim 7 at a different time from the suggestion of claim 6 and he probably took it from another application. These claims are for the most absurdly slight differences in verbiage. The Hayden patent appears to be a patent for different collocations of words, rather

than for new combinations of mechanical elements.

But everything embraced in these claims was given up by Hayden and abandoned by the cancellation or amendment of claim 6 on August 25, 1900, as before shown, with the single exception of the "depending" or "beneath-the-runner" *scale pan.* It is unnecessary to discuss the Herr patent, 651801, in view of which this claim was cancelled. It is not in evidence, but was shown to the court at the hearing below. *But it is the effect given to this patent by the admission as to its force and the amendment of the rejected claim, that is of importance.*

The "depending" scale pan is then the only thing upon which this claim 6 rests for patentability over the old matter cancelled, in view of the Herr patent. It was certainly a most extraordinary distinction for the examiner to draw, in view of his previous rejections. He apparently desired to offer something as a sop to Hayden in view of the mistake he had made in suggesting the claim and in overlooking the Herr patent, and the trouble he had caused Hayden in withdrawing the case from issue. But in *nearly all of the prior patents in defendant's record the scale pan is "depending" from the runner,* and it is, of course, the ordinary way, and a hundred years old, of hanging the scale pan in a meat scale or other suspending spring scale.

How could this old characteristic feature add anything of patentability to the claim? Hayden might just as properly have added as a distinction, "the scale being painted green."

Is it any identification of a man to say he has two arms and a nose?

That each of these claims is for a mere aggregation of old elements, lacking patentable invention,

is clear, we submit, from the foregoing review of the prior art, and Hayden's action in the office.

Mr. Browne admits, by not contradicting Mr. Whittlesey's testimony, that every feature of mechanical construction of these claims is old in any one of several patents, and Hayden had already admitted that there was no patentability in "standing up" these scales vertically.

The claims in this patent which were "rendered allowable" by the repeated adding on of words descriptive of old characteristic features, are plainly within the doctrine, and accord with the circumstances in the well known case of Richards *vs.* Chase Elevator Co., 158 U. S., 299, 1894, where the alleged inventive combination related to a grain transferring apparatus. The Supreme Court, by Mr. Justice Brown, said:

> "The patent in question is for the combination of, first, a fixed or stationary building; second, two railway tracks; third, an elevating apparatus; fourth, elevator hopper-scales, having a fixed or stationary hopper, provided with a valve or slide in its bottom; fifth, a discharge-spout, arranged for discharging the grain directly from the hopper into a car.
>
> "The second claim has the same combination duplicated, with the addition of a horizontal conveyer; the chutes J J having therein doors or valves, and the sides or doors O O.
>
> "It is not claimed that there is any novelty in any one of the elements of the above combination. They are all perfectly well known, and if not known in the combination described, they are known in combinations so analogous that the court is at liberty to judge of itself

whether there be any invention in using them in the exact combination claimed. We do not feel compelled to shut our eyes to a fact so well known as that elevators have, for many years, been used for transferring grain from the railway cars to vessels lying alongside, and that this method involves the use of a railway track, entering a fixed or stationary building; an elevator apparatus; elevator hopper-scales for weighing the grain; and a discharge-spout for discharging the grain into the vessels. There is certainly no novelty in using two tracks instead of one, or discharging the grain into a second car, instead of a storage-bin or a vessel. Unless the combination accomplishes some new result, the multiplicity of elements does not make it patentable. So long as each element performs some old and well known function, the result is not a patentable combination, but an aggregation of elements. Indeed, the multiplicity of elements may go on indefinitely without creating a patentable combination unless by their collocation a new result be produced. Thus, nothing would have been added to the legal aspect of the combination in question by introducing as new elements the car from which the transfer was made; the engine that drew such car; the steam shovel; the engine that operated the shovel and the elevator; as well as the locomotive which drew the loaded car from the building, though these are all indispensable features, since each one of them is an old and well known device, and performs a well-understood duty.

"Suppose, for instance, it were old to run a railroad track into a station or depot for the reception and discharge of passengers, it certainly would not be patentable to locate such station between two railroad tracks for the reception of passengers on both sides, and to add to the accommodations a ticket-office, a newspaper-stand, a restaurant, and cigar-stand, or the thousand and one things that are found in buildings of that character. It might as well be claimed that the man who first introduced an elevator into a private house, it having been previously used in public buildings, was entitled to a patent for a new combination.

"Not a new function or result is suggested by the combination in question. The cars run into the building on railroad tracks, as they have done since railways were invented. The building is fixed and stationary, as buildings usually are. It is no novelty that it should contain an elevating device, and that the latter should raise the grain to the hopper-scale, and should discharge it either into a bin or a vessel, or into another car. In principle it makes no difference which.

"In fact, the combination claimed is a pure aggregation, and the decree of the court dismissing the bill is, therefore, affirmed."

And on the rehearing of this case (160 U. S.) the court affirmed the above doctrine.

In the case of Lumber Co. *vs.* Perkins, 25 C. C. A., 613, 80 Fed. Rep., 528, the patent was for a shingle sawing machine and 12 claims were in issue. All

were held invalid. The Circuit Court of Appeals discussed the prior patents and showed that all the parts of the combinations claimed were in different patents. The court then says:

> "The foregoing propositions, and especially the conclusions supposed to result from them, are strenuously controverted by the opposing expert, Mr. Powers, who, after pointing out particulars of difference between the devices of O'Connor and Perkins, says:
>
> " 'I am aware that the witness, Bates, states that the missing elements not shown by the O'Connor patent may be found in some other patents in the record, but I do not understand that an anticipation can be created by taking up elements in different patents, and combining them for the occasion; but, on the other hand, in order to anticipate the claim of a patent, all of its elements, either identically or substantially, must be found in the same relation and combination with each other in some one patent or device.'
>
> "To the doctrine of selection he refused to subscribe, and for that reason failed to find the invention of Perkins in the patent of O'Connor. In matters of fact the entire testimony of the witnesses shows them to be in substantial accord. Their differences of opinion are explained by Mr. Powers' mistaken understanding of the rule by which the patentability of combinations of old devices should be determined. That the mere bringing together, in a new combination, of old devices or elements, especially if they belong to the same art or arts kindred to that which the

combination belongs, does not constitute invention, is well settled. 'It is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known and that it shall be useful, but it must, under the constitution and statute, amount to an invention or discovery.' Thompson *vs.* Boisselier, 114 U. S. 1, 11, 5 Sup. Ct. 1042; Hill *vs.* Wooster, 132 U. S., 693, 10 Sup. Ct., 228; Burt *vs.* Evory, 133 U. S., 349, 10 Sup. Ct., 394; Pickering *vs.* McCullough, 104 U. S., 310; Florsheim *vs.* Schilling, 137 U. S., 64, 11 Sup. Ct., 20; Adams *vs.* Stamping Co., 141 U. S., 539, 12 Sup. Ct., 66; Deere & Co. *vs.* J. I. Case Plow Works, 9 U. S. App., 537, 6 C. C. A., 157, 56 Fed., 841. The difference between the dogs described in the patent of Perkins and those of the earlier patents are differences of form and arrangement which produce nothing new in function, result or mode of operation. It is certainly not a matter of invention that a bent arm is operated by centrally located cam instead of an outside ring, there being no essential difference in the result; or that one dog, rather than the other, is made movable; or that an arm is not radial, extending centrally down in a machine to operate upon an interior cam; or that levers extend over and are actuated outside instead of inside the periphery of the carriage; or that a spring is shown without means of adjustment for greater or less tension, such means being well known; or that a radial arm extends outward a considerable distance beyond the periphery of the carriage,

and has its outer dog not pivoted to, but integral with it; or that a radial arm does not extend over and beyond the inner dog; or that a dog is adapted to be released beyond the periphery of the carriage instead of by an interior cam; or that a rectangular frame is employed instead of an arm; or that a cam instead of a spring is used to push the dog into place. It is testified, and perhaps would be evident without proof, that of these various forms of construction and arrangement of parts, while one may be better than another, the differences are not such as to affect the question of invention."

The case before the court presents an even clearer case of aggregation than the well-known cases of Durham *vs.* Seymour, 6 D. C. Appeal, cases, 103; *in re* McNeil, 20 D. C. Appeal, cases, 294. See also Hailes *vs.* Van Wormer, 20 Wall., 353; Pickering *vs.* McCullough, 104 U. S., 310, 317; Thatcher Heating Co. *vs.* Burtis, 121 U. S., 286.

In the leading case of Wright *vs.* Yuengling, 155 U. S., the alleged invention related to a guide head for steam engine cross-heads. The state of the art disclosed that a cylindrical guide was old; that a trough-like connection was old; and that a combination of a flat guide and a trough was also old. *Held,* that claim 2, which covers a combination of the cylindrical guide and trough-like connection is void, as covering a mere aggregation, or, if the combination is superior to the old one, it is a difference in degree, not rising to the dignity of invention.

Appellant has referred to the interferences with

Culmer and Stimpson as tending to impart some strength of patentability to the claims. But the interference was found to exist before the examiner found the Herr patent, and apparently he did not care to dissolve the interference himself, as he should have done. As appears from the record, the interferences were never contested and judgment was awarded Hayden by default. Moreover, it is settled law that an interference proceeding is of no force against a litigant not a party to the interference.

> Westinghouse Electric & Mfg. Co. *vs.* Roberts *et al.*, 125, N. R. 6.

And it has been repeatedly held by this court that the question in issue and determined by an interference is solely that of priority and not of novelty.

NON-INFRINGEMENT.

The defendant-appellee owns and its scale is made under some of the claims of the patents to C. F. and C. K. Christopher, August 17, 1897, No. 588128; C. F. Christopher, May 1, 1900, No. 648609; and C. F. Christopher, September 25, 1900, No. 658732. See Record, pp. 123, 128-135.

The two latter patents were pending at the same time with the Hayden patent in suit and were issued about two years before the Hayden patent. The application of patent 648609 was filed December 9, 1899, and the application of patent 658732, March 20, 1900. Hayden's application was filed September 8, 1899, and patent issued May 27, 1902.

Patent 648609 relates to a suspended spring scale and patent 658732 to a platform or counter scale. Both have a vertical cylinder provided with cost com-

putations, an external indicator, provided with prices per pound and co-operative with the graduations or computations on the cylinder, one of these parts being revoluble with reference to the other, and a weight receptacle or scale-pan connected to a vertical runner which is connected to the weighing receptacle or scale-pan, a rotatable rod on which the revoluble indicating part is carried, a rack and bevel gearing between said rod and another rod connected to the runner and weighing springs connected to the runner, whereby when the weight receptacle is depressed by a load placed thereon the revoluble indicating part will be turned so that weight will be indicated and also total cost will be automatically indicated on the cylinder.

In the second patent, No. 658732, there is a broad claim, number 8, covering this construction, as follows:

8. In a device of the class described, the combination of two members, a vertical cylinder having graduations, and an indicator co-operating with said graduations, one of these members being revoluble with reference to the other about a vertical axis, of a weight receptacle operatively connected to impart rotation to the revoluble member; and a spring within the cylinder, connected to the weight receptacle and tending to resist the depression of the latter, substantially as described.

This claim *covers the construction of the Hayden patent,* and it also covers defendant's scales, as made. In Christopher's arrangement the external indicator consists of the arm or frame marked 24 and 17, respectively, in patents 648609 and 658732, carrying

the prices per pound and a finger to point to the pounds, and in Hayden's arrangement the outside casing or frame with its vertical row of prices per pound and its pointing wire b' constitute the external indicating device.

Hayden was given a chance by the Patent Office to make this broad claim so as to have an interference with Christopher to determine the question of priority of invention. (Record, p. 160.) In notifying Hayden of the existence of this dominating claim in another application, the examiner wrote:

> "If applicant intends to insert the suggested claim he should do so within twenty days from date. If the claim is not inserted within that time, it will be considered that 'such failure or refusal shall be taken without further action as a disclaimer of the invention covered by the claim.' (Rule 96.) If the claim is inserted, a supplemental oath should be filed as provided by Rule 48."

Hayden did not insert the claim, and he thereby disclaimed the matter of the broad claim and conceded it to Christopher.

Therefore if there is anything of patentable merit in the broad idea of the arrangement of the vertical graduated cost-computation cylinder in connection with the external indicating frame, said cylinder and frame being relatively rotatable and operative by the depression of the depending scale pan to automatically indicate the total cost of an article, it belongs to the defendant company and not to the complainant. And had the complainant ever made this scale and introduced it on the market as defendant

has, the position of the parties hereto would probably be reversed.

Comparison of Appellee's Scale with Hayden patent.

That the Patent Office did not share the view of Mr. Browne as to the vertical arrangement of the casing and computing drum being the novel and controlling feature of the case is manifest from its treatment of the claims sued upon and as already referred to. Claims 6, 7 and 8, in the patent, being substantially the same, and they together with claims 1 and 2 all having been bereft of any broad, original idea or arrangement by the mutual actions of the Patent Office and applicant, we contend that nothing was left of a patentable nature in Hayden's case, unless it was *the particular means Hayden employed to connect* the central non-rotating rod with the rotating computing chart-drum, and which means are different from the defendant's arrangement.

On this point Whittlesey's testimony is as follows:

> "In the Hayden patent, as already stated by me, the load-supporting rod has a screw thread which engages with rollers secured to the lower end of the rotating cylinder and inasmuch as this rod is not rotatable its longitudinal movements between the roller causes them to revolve around the axis of the rod as they follow the turns of the thread, thereby rotating the cylinder to which they are attached.
>
> "In the defendant's scale the load-carrying bar has a rod which is extended upward at

one side of the point at which the load-carrying hook is arranged and this rod carries a rack which meshes with a pinion on a short horizontal shaft journalled in suitable bearings on a cross-bar of the frame of the machine. On this shaft is a bevel gear which meshes with a bevel pinion secured to an upright shaft journalled in bearings in the frame and projecting above the same in order to receive a light frame composed of cross-arms and a circular rim to which is secured the depending chart-drum. The downward movement of the load-supporting hook causes a consequent downward movement of the rack which rotates the short horizontal shaft by means of the pinion and this rotary movement is communicated by beveled gears to the upright shaft carrying the chart-drum.

"There is thus a marked difference in the specific mechanism of the two scales by means of which the downward movement of the load is translated into the rotary movement of the cylinder.

"It may be noted that there is another difference in construction between the Hayden patent and the defendant's scale in that the cross-head which connects the lower end of the two springs is arranged in the Hayden patent above the bottom of the rotating cylinder, so that the load-supporting rod which connects the scale-pan with said cross-head passes through the bottom of both cylinders and exerts its torsional effect upon the rotatable cylinder at a point between the scale-pan and said cross-head. In the defendant's scale this

> cross-head is arranged underneath the bottom of the cylinders and outside of the same and the turning effect is not produced by any part which connects this cross-head with the scale-pan, but on the contrary it is effected by an independent rod rising from the cross-head into the cylinder and carrying the rack which I have mentioned above. In one sense, therefore, the rotation of the cylinder is not effected by the load-carrying rod since there is no element in defendant's scale which may be said, strictly speaking, to correspond with the load-carrying rod E of the Hayden patent. It is therefore questionable whether a strict construction of claims 1 and 2 of the Hayden patent would permit them to read upon the defendant's scale."
>
> Rec., pp. 70 and 71.

The constructions being thus radically different, let us see in what feature of the appellee's scale Mr. Browne finds the "cylinder revolving rod"—the essential novel point in claims 1 and 2, according to the Patent Office view. Turn to page 16 of the Record. On the face of that statement alone we submit that it is clear that there is no infringement of claims 1 and 2. There Mr. Browne says that the hook at the bottom of defendant's scale, adapted to receive the scale pan, is a "rod" corresponding to and the equivalent of the rod claimed in Hayden's first and second claims. Of all the far-fetched hypotheses given to this case, by complainant, this interpretation reaches the limit. The claims specified call for a "cylinder revolving rod;" that is, a rod having a form or construction whereby it revolves the cylinder. Defen-

dant's hook is a hook and nothing else. The means for revolving the cylinder are such means as are shown in Christopher's patents, to which Hayden conceded priority, and substantially in other prior patents, and they consist of a rack-bar attached to the runner, a *rotating* shaft carrying the computing cylinder and three gear wheels between the rack-bar and rotating shaft. Nor is there any rod "suspended from the casing" that is hanging down so as to pass through the cylinders.

Now compare both appellee's and appellant's mechanisms for rotating the cylinder with that shown in the prior patent to Smith, page 106 of the record. In Smith we find the runner, and the scale-pan hook depending therefrom, just like appellee's; if appellee's hook is a rod like that of Hayden's claim, then so is Smith's; we find rack-bar e′ like appellee's and pinion f′ engaged thereby, and then we find in appellant's construction that bevel gears additional to Smith's are inserted in order to accommodate the gearing to a vertically-mounted shaft. If the "rod" of the 1st and 2nd claims or the "translating means" of the 6th, 7th and 8th claims apply to appellee's construction, then they also apply to Smith's construction and the claims are anticipated.

If the "rod" and the " translating means" be held limited by grace of the court, in order to save the claims, to the suspended spiral rod and the rollers engaged thereby "for translating the vertical movement of the runner into the rotary movements of the chart-drum," then there is no infringement by appellee because it does not have that construction.

The court below did not see fit to thus save the claims. The court, in effect, said that Hayden had chosen to cover the specific translating means be-

tween the rod and the cylinder consisting of the spiral and the rollers in other claims, which are not alleged to be infringed, and that therefore it was unnecessary to decide whether appellee had an equivalent translating mechanism.

ANTICIPATION BY THE C. F. CHRISOPHER INVENTIONS.

The Supreme Court of the District found it unnecessary to consider this defense.

It is, nevertheless, a complete defense to appellant's case, it established, and we submit that the proofs do sufficiently establish it.

What Christopher invented eventuated in the patents 648609 and 658732 *issued long before Hayden's patent and co-pending with his application.* It is a not mere isolated, unconnected construction or use then, that this defense rests upon, but involves the consideration of the time of invention of a practical machine reduced to practice and patented.

Claim 8 of the Christopher patent 658732, in broad, clear terms, certainly covers the matter in the disputed 1, 2, 6, 7 and 8 claims of Hayden. The applications of these parties were pending in the Patent Office at the same time and the Hayden disclaimed this matter, admitting thereby priority to Christopher.

The authorities agree that a patentee may go back to his incipient efforts—such as models, sketches and communications to others—to establish the date of his invention. Sup. Ct., in Loom Co. *vs.* Higgins, 105 U. S., 594. It is only necessary that such communications must be sufficiently clear as to be understood and remembered by those to whom they were made. Coffin *vs.* Ogden, 18 Wall., 120; Brush *vs.*

Condit, 132 U. S., 39; Reed *vs.* Cutter, 1 Strong, 598; Bedford *vs.* Hunt, 1 Mason, 301; Walker on Pats., Secs. 70, 71.

Calvin F. Christopher and his son, Colonel K. Christopher, applied for a patent January 16, 1896, on which application was granted and issued patent No. 588128, August 17, 1897, which is of record for what is called in title of the patent a "Ready Calculator," but would have been more correctly called a "Price Scale," or a "Computing Spring-Balance Scale," as it possesses all the functions of automatically ascertaining the weight and cost of a body of merchandise, and most of the mechanisms therefore are set forth in complainant's patent 700919.

It first provides for an outer stationary casing which encloses an horizontal inner computing chart-drum and mechanism for rotating that chart-drum. The outside casing is provided with a pointer and dial with figures to indicate weight, said case slotted so as to disclose proper numbers of cost or price adjacent to the weight figures, a platform, a scoop, and a hooked arm, on any one of which the merchandise may be put, which support is connected with a vertical spring controlled rod or rods and frame within the casing, said frame or rod connected by pinions and other gearing to the horizontal computing cylinder, whereby when an article is put upon the carrying receptacle a longitudinal movement is imparted to the said vertical rod and frame, which motion is communicated to the chart-drum, and at the same time the weight is indicated on the outside of the casing and the corresponding price in the drum.

About the same time of filing this application, January 8, 1896, Calvin, the father, conceived the arrangement of the vertical computing cylinder sub-

stantially as shown in patents 648609 and 658732, p. 128-135, and then made a model of the same. It is well to remember that the defendant company own the Christopher patents, and, according to the testimony in behalf of complainant, work under them.

The testimony of Calvin as to this model, etc., was first taken at Cruso, N. C., where Christopher resided, in December, 1902 (Record, pp. 57 to 60). Christopher therein declared that it was in *January, 1897*, that he made a scale with an outer fixed casing and inner rotatable casing, both arranged vertically (Ans. 6, 7, p. 7). Having discovered after this testimony was closed that he was mistaken as to this date, he was recalled at Washington July 23, 1903. He then swears that he was mistaken in his former testimony to the effect that he discovered or invented the vertical casing and inner rotatable cylinder in January, 1897, as he had it on exhibition then in his store window at Spartanburg, S. C.; but that he had conceived the idea of the vertical scale in 1894 and made drawings of it, but did not commence to make it until the latter part of 1896, when he finished it and hung it in his window where the public could see it. With this exception as to the date of his conception of the vertical invention, his testimony at both places agrees as to what he did. Nothing was preserved by him as to what was done prior to 1896, only parts of his model made in 1896 are produced, and some of these have been altered. In 1896 model was made roughly of tin and pasteboard, wood and other materials. The parts of the model made in 1896 are Complainant's Exhibits 1, 2, 3 and 4; and that it was a model, not a full-sized scale, but that it weighed about 12 pounds; that he hung it in the window of his store at Spartanburg, S. C., and exhibited it, and

there used it for weighing his home supplies three or four months (Record, pp. 58, 60, and pp. 43 to 65).

The part Exhibit 1 is a spindle rod with a pinion at its center, designed to be placed upright in a frame (Exhibit 2) and to carry the inner cylinder which enclosed the frame and was secured at its top to the top of the spindle. The frame 2 also carried a pivoted segmental lever bar having a set of cogs adapted to engage with the spindle pinion. This lever frame with its half circular row of cogs has an arm or peg extending out at right angles therefrom to which a spiral spring was attached, and to this spring was connected a weighing pan. The action of the spring was to hold the set of cogs out of engagement with the pinion until a weight was placed on the pan. When a weight was thus placed the spring was pulled down, the cogs moved to engage with the pinion on the spindle and the spindle and inner cylinder rotated. The outer cylinder was provided with a slot, a half inch wide extending from top to bottom, and along one side of this slot was printed a row of numerals at regular intervals to indicate different prices per pound. The inner cylinder was provided with circular rows of figures indicating pounds and ounces, and a pointer was formed on the outer cylinder adjacent to the slot, pointing from the price per pound on the outer cylinder to the amount of cost indicated to a figure or figures on the inner cylinder indicating the total result.

The number of pounds was indicated on a row at top of the inner cylinder. When articles to be weighed was put on the scale pan, say five pounds, the price of which was five cents a pound, the inner cylinder would be revolved so as to bring the total,

25 cents, opposite the price out on the outer casing, and the number of pounds would be indicated in the same vertical row at the top of the inner cylinder.

This was the idea substantially patented by C. F. Christopher in his patents 648309, May 1, 1900, and 658732 of September 25, 1900, the latter being a division of the former as far as the broad 8th claim of the later patent is concerned. The entire model was not preserved. The outer and inner cylinder and the springs were lost, the spindle screw threaded at its ends for another purpose, and the pinion shifted from its former position. Exhibits 3 and 4 are screws which Christopher and his son testify were used to revolve the inside drum, but finding that they produced too much friction, they were discarded. The evidence in the case does not show that the screw idea was afterward was ever used by anyone. This idea Hayden has in his patent. The changes made in some of the parts and losses of others are to be regretted, but Christopher is corroborated as to his former experiences and final reduction to practice in 1896 by four witnesses.

His son, C. K. Christopher, testifies that he was a joint inventor with his father of the machine in patent 588128, that he and his father went to Washington in January, 1896 and had the application prepared and returned to Spartanburg the same month; that just before they went to Washington his father talked of the vertical cylinder, and they went to work on it after their return; that he formed Exhibit No. 2 from an old arc light given him by a Mr. Fleming, Superintendent of the Etna Light and Power Company of Spartanburg, with some other wheels and gearing which he turned over to his father, and he helped his father to adapt the parts to the new scale.

He describes the assemblage of the parts and the general appearance of the apparatus, and points out its resemblance to the corresponding parts in patent 648609 of May 1, 1900.

Record, pp. 24, 25, 26, 28.

A. G. Pless, brother-in-law of Christopher, was living with him at Spartanburg, 1895-'96, and going to school there; left there in January, 1896, and went to Cruso, N. C. Before he left he saw a computing scale which was made by Christopher and which weighed and computed the cost of the articles. He does not remember all particulars, but the computations were first made on paper and applied to a cylinder. He, Pless, helped to make the figures or calculations on the paper. The calculator or computing cylinder was in a casing. A paper with the prices on was put on the outside casing, and a paper with figures indicating cost per pound placed on the inside casing; that Fig. 9 in Chistopher patent 358,732, and Fig. 2 in Hayden's patent 700919, resemble the cylinder Christopher had. The outside casing had a slot, through which the figures could be seen on inside cylinder. The apparatus was not completed when he left, but weighing had been attempted on it.

Record, pp. 45-46.

Wm. T. Finch, a grocer of Spartanburg, saw a couple of models at Christopher's store in the latter part of 1896, or the first part of 1897; one was a counter scale, a computing counter scale, and the other was a computing swinging meat scale. (Page 50.) Finch wanted a scale like the latter. In January, 1897, he took his bookkeeper over to Christopher's store and showed him the apparatus in Christopher's

show window, which had a pan for holding the articles hung directly under a revolving drum, on which figures were placed, being within a stationary casing. He describes how the outside casing was slotted up and down and how it was hung from an arch. Everybody passing could see it (p. 52).

Wm. M. Bomar, of Spartanburg, testifies that Christopher commenced talking to him about computing scales in 1893. Christopher bought some spring scales and pan of him with which to make experiments. In last part of 1896 or the first of 1897 he saw the Christopher hanging scales in Christopher's window at his store (p. 84). Christopher had a repair shop, mended, rented and sold bicycles, guns and small machinery. He describes how the Christopher scale was hung from an arch in the window of Christopher's store, where the window was; how the figures were placed on the inner cylinder which was arranged in vertical position and was revolved in the outer casing when an article was weighed; how through a slot in the outer casing the figures were seen and what the dimensions of the scale were in height and diameter. He did not see the operating mechanism because it was inside the revolving cylinder, and does not describe that. Fixes the date by examination of account books, conversations with others. He saw this apparatus while it hung in Christopher's window in 1896-1897, dozens of times, and saw other people there. Christopher moved away from Spartanburg in 1898. Rec., pp. 53 to 57.

The testimony of these witnesses is very carefully given; there is an evident desire to tell the exact truth, and it bears every indication of being honest. It seems to us that there can be no doubt from all this testimony that Christopher made the vertical scale

and had it in successful working experimental shape two or three years before Hayden's application of Sept. 9, 1899, on which this patent 709919 was issued.

Christopher's 1896-7 scale was not a mere abandoned experiment. It was actually reduced to practice and he and his son describe the details and five witnesses testify that it had an outer indicating cylinder, an inner rotatable computing cylinder, and that when articles were placed on the scale-pan the computing cylinder would be automatically revolved so as to indicate the price of the article. He came up to Washington in September, 1899, and in December, 1899, while Hayden's patent was pending, applied for a patent on a slightly modified form of his original vertical scale, changing the relation of rotability of the two indicating parts and cutting away the outside frame, as he testifies, so as to form a mere arm for the sake of lightness. It was merely a preferred form and the broad claim 8, of patent 658732, disclaimed by Hayden, covers both the original and the patented form. And the defendant company preferred to use, and had a perfect right to use the rotating cylinder of the old form.

We believe that Christopher and his witnesses have brought this case within the test prescribed in such cases by the U. S. Supreme Court in Coffin *vs.* Ogden, 18 Wall, 120, and since followed by that and other courts. That was the case of a door lock having a reversible latch which enabled it to be opened either to the right or the left hand. No question was raised as to the complainant's title, the breadth of his claim, nor the fact of infringement. One, Erbe, was alleged to have been the first inventor. He had no patent, and the testimony of himself and the three others related to a lock which had been made a number of

years before the testimony but had been lost or was not produced and no others had since been made like it by Erbe.

The Supreme Court, after an examination of the testimony of each of the witnesses in that case, said:

> "The invention or discovery relied upon as a defense must have been complete, and capable of producing the result sought to be accomplished; and this must be shown by the defendant. The burden of proof rests upon him, and every reasonable doubt should be resolved against him. If the thing were embryonic or inchoate; if it rested in speculation or experiment; if the process pursued for its development had failed to reach the point of consummation, it cannot avail to defeat a patent founded upon a discovery or invention which was completed, while in the other case there was only progress, however near that progress might have approximated to the end in view. The law requires not conjecture, but certainty. If the question relate to a machine, the conception must have been clothed in substantial forms which demonstrate at once its practical efficiency and utility. Reid *vs.* Cutter, 1 Story, 590. The prior knowledge and use by a single person is sufficient. The number is immaterial. Bedford *vs.* Hunt, 1 Mason, 302. Until his work *is done* the inventor has given nothing to the public. In Gayler *vs.* Wilder the views of this court upon the subject were thus expressed: 'We do not understand the Circuit Court to have said that the omission of Conner to try his safe by the proper tests

would deprive it of its priority; nor his omission to bring it into public use. He might have omitted both, and also abandoned its use and been ignorant of the extent of its value; yet if it was the same with Fitzgerald's the latter would not, upon such grounds, be entitled to a patent; provided Conner's safe and its mode of construction were still in the memory of Conner before they were recalled by Fitzgerald's patent.' Whether the proposition expressed by the proviso in the last sentence is a sound one, it is not necessary in this case to consider.

"Here it is abundantly proved that the lock originally made by Erbe 'was complete and capable of working.' The priority of Erbe's invention is clearly shown. It was known at the time to at least five persons, including Jones, and probably to many others in the shop where Erbe worked; and the lock was put in use (being applied to a door), as proved by Brossi. It was thus tested and shown to be successful. These facts bring the case made by the appellees within the several legal tests which can be applied to them. The defense relied upon is fully made out."

SUMMARY.

In conclusion we submit:

1. That all the claims sued upon in terms and according to the interpretation given by Browne, appellant's expert, are anticipated by the prior art *as that art is admitted* by Hayden's actions in the record of the patent itself and in connection with the

disclosure of the details added by amendment in some of the very patents cited and admitted to be pertinent.

The claims sued upon will not stand the test prescribed by the Supreme Court:

> "The claim for a patent as allowed must be read and interpreted with reference to a claim that has been rejected, and to the prior state of the art, and cannot be so construed as to cover either what was rejected by the Patent Office or disclosed by prior evidence."
>
> Hubbell *vs.* United States, 179 U. S., 77-86.

2. That there is no infringement by defendant of claims 1 and 2 of the Hayden patent, either in terms, since defendant's scale does not have the "cylinder revolving rod suspended from the casing," nor its equivalent, because defendant has an independent arrangement adapted and modified from the prior art; nor if the particular connecting means are read into the claims to save them.

3. That claims 6, 7 and 8 could only be saved from the prior art by understanding the phrase "mechanism for translating the vertical movement of the runner into the rotary movement chart drum" to define the suspended rod with its spirals engaging the rollers or other projections on the cylinder, and that defendant would not infringe the claims when so limited because it does not employ that construction or its equivalent.

4. That Christopher, defendant's assignor, devised not only the broad idea of the vertical arrangement, as admitted by Hayden in disclaiming the broad 8th claim, but also the specific form of scale now used by

defendant, and that therefore Hayden's claims sued upon are anticipated.

5. That the complainant with narrow, invalid claims on immaterial details, and without ever having made a practical scale under its patent, or any vertical scale, so far as the evidence shows, and never having made known its scale to the trade and public except through a patent issued two years after defendant's vertical scale patents and after defendant had built up a large business, is now endeavoring to stop defendant from the enjoyment of its own independent, purchased and patented devices.

It is believed that the decree should be affirmed.

Respectfully submitted,

E. HILTON JACKSON,

H. P. DOOLITTLE,

Counsel for Appellee.